



**PRESENTATION  
TO  
STATE OF MICHIGAN JOINT HOUSE AGRICULTURE  
AND  
HEALTH POLICY COMMITTEE**

Good afternoon, my name is Dan Lennon and I am the President and CEO of the Michigan Turkey Producers. I am here to speak on behalf of our 430 plant employees, 200 farm employees and 16 turkey growers who own and operate 43 West Michigan Turkey farms. Between the wages we pay our employees, the Michigan feed our turkeys consume and our utilities and supplies usage, the Michigan Turkey Producers generate in excess of \$75 million of economic benefit here on the west side of the state.

The topic being discussed today is Avian Influenza. I will attempt to characterize, from a producer perspective, what I believe are some media-created misconceptions or falsehoods regarding Avian Influenza and I will share what actually is occurring in this area in our organization. I will also provide several suggestions for the committee that we feel are critically important "next steps" which will require legislation.

Avian Influenza has generated a tremendous amount of media coverage in the past several months. One could easily infer from the constant almost daily reference to Avian Influenza that:

1. All avian influenzas are the same and are harmful.
2. An outbreak of harmful AI in America is imminent.
3. The America poultry industry is ill prepared to deal with a crisis.
4. If disease did come to our shores that it would go unchecked.

I believe all 4 of these inferences are false.

**Falsehood #1.....All AI are the same and are harmful.**

There are many subtypes of Avian Influenza and it is easy to generalize that all these types are harmful. The truth is that two types of AI are generally recognized to be very harmful to poultry, and they are the Hemagglutinin 5 (H5) and Hemagglutinin 7 (H7) types. These can either be low pathogenic (LPAI) or highly pathogenic (HPAI) for birds. The current "Asian Flu" or "Bird Flu" is a highly pathogenic H5 N1 Strain Type Z. The United States does not have nor has it ever had this strain of H5 N1 Avian Influenza. This is the only Avian Influenza strain that has been linked to human cases of bird flu in Asia and more recently the Country of Turkey. Further, this highly pathogenic H5 N1, Strain Type Z is linked to people only by intimate contact with H5 N1 infected sick or dead birds.



**Falsehood #2.....An outbreak of harmful AI in America is imminent.**

The United States has never imported poultry products from Southeast Asia and since the Asian flu crisis erupted, the U.S. government has also prohibited importation of live birds and other potential carriers of Avian Influenza. Scientists are routinely checking migratory wild birds and to date there is no indication that HPAI is moving in the Western Hemisphere via that route. Humans are a possible vector as well but unlike Southeast Asia and several other outbreak countries, in America human contact with live birds is either non-existent or is severely restricted.

**Falsehood #3.....The poultry industry is ill prepared to deal with a crisis.**

The commercial poultry industry is aggressively testing flocks to confirm absence of disease, even in obviously healthy birds. At Michigan Turkey, we have been blood-testing flocks in an active surveillance program since 2002. Birds are tested at 3 separate ages. If an issue exists we know about it, we report it to our State Veterinarian and we subtype to determine if the AI is potentially harmful. Again, not all AI is harmful and the subtyping dictates whether we should take further action or not.

In addition, many other biosecurity measures are in place. Access to our farms is restricted. Delivery vehicles are sanitized inbound and outbound. Personnel tending to flocks wear personal protective equipment where appropriate. This is in stark contrast to many other countries where birds are commonly raised in backyards and are sold in crowded live bird markets.

**Falsehood #4.....If harmful disease did come to our shores it would go unchecked.**

Diligent surveillance on commercial farms is in place industry-wide. It is extremely unlikely that birds carrying a harmful virus will ever leave the farm. In Michigan, we have in place a Michigan Emergency Avian Disease Manual that was produced by the Michigan Department of Agriculture in cooperation with the Michigan State University Diagnostic Center for Population and Animal Health, Michigan Allied Poultry Industries and Michigan Area Veterinary Services. This manual outlines a detailed decision tree to deal with any disease situation up to and including the depopulation and disposal of a flock, the protection of all personnel involved and the cleaning and disinfection of the premises.

In summary, Michigan Turkey Producers and our Allied Poultry partners have anticipated the possibility of human health risks associated with highly pathogenic Avian Influenzas. We have stringent biosecurity and an active surveillance protocol in place to detect an issue, should it arise, plus an Emergency Avian Disease plan in place to prevent spread and to eradicate an issue on farm should it arise. These practices have been formally in place for 4 years. This is the way we run our business, it is not "window dressing" but is a necessary on going management tool.



At Michigan Turkey Producers our mission has always been to provide great tasting, wholesome product to our customers and we will continue to do whatever is necessary to achieve that goal.

What can you do? Much discussion at the national level and actual Federal appropriation of funds to date have focused on vaccines and/or health care preparedness. Clearly this is important. Of equal importance is prevention of the disease from gaining a foothold in the U.S. We are asking that: 1) State and Federal Legislators move quickly to establish an indemnification plan so that IF a HPAI is detected and IF depopulation on farm is warranted, the grower and the industry are protected. Deploying financial resources exclusively on the health care or treatment side of the issue is likely far more risky to human health than a proper detection and eradication program on the farm; 2) Relook at funding available to the Michigan Department of Agriculture, specifically the State Veterinarian's office. They currently do not have a poultry Veterinarian on staff and have been under a hiring freeze for the past 2+ years; and 3) Relook at funding available for the MSU diagnostic laboratory which has gone from 80% funded by the state to 20% funded by the state in the last 15 years. And finally we need to be sure that MSU Extension has the staff and resources they need to support industry in the area of disease surveillance and prevention strategies. In short, please be sure that resources are allocated to prevention and containment and not just to treatment should an outbreak occur.

Thank you for your time and attention.



## **WEST MICHIGAN ECONOMIC IMPACT\***

- ❖ **405 jobs created amounting to nearly \$10.1 million in payroll and \$3.3 million in benefits.**
- ❖ **Feed consumption of 4.5 million turkeys**
  - 50M tons of soybeans or \$10 million
  - 7.5 million bushels of corn or \$15 million
- ❖ **Utilities**
  - 700,000 gallons of water/day or \$450,000/year.
  - Waste water \$150,000.
  - 16-18 million kwh/year or \$1.0 million year
  - Gas at \$700,000
- ❖ **Other Annual Plant Expenditures**
  - \$3-4 million in supplies/chemicals.
  - \$1-2 million in packaging.
  - \$1-2 million in maintenance/repair
  - \$1-2 million load and haul (tires, gas, labor)
- ❖ **200 jobs at the farm level worth approximately \$4 million in payroll and \$1.5 million in benefits.**
- ❖ **Poult expenditures of \$6.9 million.**
- ❖ **43 Farm locations and associated tax base.**
- ❖ **Other Farm Expenditures**
  - \$12-14 million in maintenance, supplies, equipment, medicine, etc.

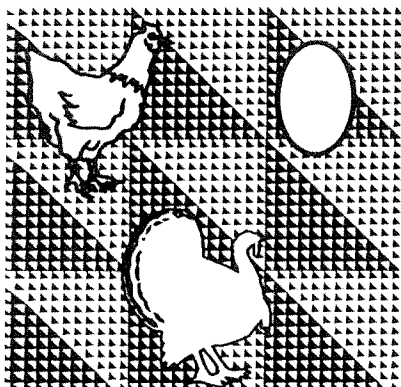
**TOTAL ANNUAL ECONOMIC IMPACT = Over \$70,000,000/year**

**\*NOTE: This Economic Impact excludes the impact of the new plant location. The new plant location will add 62 new jobs and between \$5-10 million of additional economic impact.**

# Michigan Emergency Avian Disease Manual

November 2004

Produced in cooperation with:



Michigan Allied Poultry  
Industries, Inc.

**VS**  
Veterinary Services



Safeguarding Animal Health

Michigan Area



Animal Industry Division

**DIAGNOSTIC CENTER**  
FOR **POPULATION AND**  
**ANIMAL HEALTH**

*Protecting Human And Animal Health*

Michigan State University

## **MICHIGAN EMERGENCY AVIAN DISEASE MANUAL**

This emergency avian disease manual was developed through consultation, coordination, and agreement with Michigan's poultry industry (Michigan Allied Poultry Industries, Inc.), the State Veterinarian's Office of the Michigan Department of Agriculture, the United States Department of Agriculture's Animal and Plant Health Inspection Service (USDA/APHIS) Area Veterinarian-In-Charge (AVIC) and Michigan State University. In the event of an emergency avian disease, implementation of all or part of this plan will be made at the discretion of the State Veterinarian's or USDA/APHIS AVIC Office with consultation and coordination with Michigan's poultry industry. This manual also serves as a guide to prevent the spread of infectious avian diseases as well as to assist in the development of appropriate biosecurity plans in order to prevent such an occurrence.

### **MICHIGAN AVIAN DISEASE ALERTING SYSTEM\***

A person who discovers, suspects, or has reason to believe that poultry is either affected with a reportable disease or contaminated with a toxic substance shall IMMEDIATELY report that fact, belief or suspicion to the State Veterinarian at (517) 373-1077. In the event of a catastrophic disease (large death loss), that person should also contact the USDA/APHIS AVIC Office at (517) 324-5290.

#### **NOTIFICATION SCHEME**

Once the State Veterinarian is aware of an emergency disease, they will notify the Executive Director of the Michigan Allied Poultry Industries, Inc. (MAPI). At their discretion, the State Veterinarian will contact the Animal Plant Health Inspection Service's USDA/APHIS Area Veterinarian-in-Charge. It will be the responsibility of the Michigan Allied Poultry Industry, Inc. to notify it's members. If Michigan State University's Diagnostic Center for Population and Animal Health was not the party that notified the State Veterinarian's Office of that disease occurrence, that office will notify the Diagnostic Center at (517) 353-0635.

The information to be disclosed is; stage of emergency disease notification (see page 4), disease, specific location, and date of the occurrence.

#### **IMPORTANT PHONE NUMBERS**

1. State Veterinarian (517) 373-1077 (office)  
After hours (517) 749-9295 (cell).
2. USDA/APHIS Area Veterinarian-in-Charge (517) 324-5290  
After hours (517) 719-0308 (cell)
3. Michigan Allied Poultry Industry, Inc. George House, Exec. Dir. (616) 676-5593  
(See Appendix for alternate)
4. Diagnostic Center for Population and Animal Health (517) 353-0635

\*The alerting system will be activated to the extent deemed necessary by the State Veterinarian.

## **MICHIGAN EMERGENCY AVIAN DISEASE PROGRAM**

### **DEFINITION**

An emergency poultry disease (EPD) is any poultry disease potentially causing catastrophic losses so declared by the United States Department of Agriculture or any poultry disease so declared by the Michigan Department of Agriculture. Emergency poultry disease includes, but is not limited to, List A diseases of the Office International des Epizooties [Office of International Epizootics (OIE)] and other disease with immediate catastrophic potential.

### **WHO IS RESPONSIBLE FOR REPORTING DISEASES**

Section 287.709 of Act 466 of Public Act s 1988, as amended, states:

Sec. 9 (1) A person who discovers, suspects, or has reason to believe that an animal is either affected by a reportable disease or contaminated with a toxic substance shall immediately report that fact, suspicion, or belief to the director. The director shall take appropriate action to investigate the report. A person possessing an animal affected by, or suspected of being affected by, a reportable disease or contaminated with a toxic substance shall allow the director to examine the animal or collect diagnostic specimens. The director may enter premises where animals, animal products, or animal feed are suspected of being contaminated with an infectious or contagious disease, or a disease caused by a toxic substance and seize or impound the animal products or feed located on the premises. The director may withhold a certain amount of animal products or feed for the purpose of controlled research and testing. A person who knowingly possesses or harbors affected or suspected animals shall not expose other animals to the affected or suspected animals or otherwise move the affected or suspected animals or animals under quarantine except with permission from the director.

## **MICHIGAN AVIAN REPORTABLE DISEASES**

Avian Infectious Bronchitis

Avian Infectious Laryngotracheitis (potential Emergency Poultry Disease)

Avian Influenza (potential Emergency Poultry Disease)

Avian Tuberculosis

Chlamydiosis (pet birds)

Chlamydiosis (poultry)

Duck Virus Enteritis (potential Emergency Poultry Disease)

Duck Virus Hepatitis

Equine Encephalomyelitis

Exotic Newcastle Disease (Emergency Poultry Disease, OIE List A Disease)

Fowl Cholera (potential Emergency Poultry Disease in wild waterfowl)

Fowl Pox

Fowl Typhoid (Emergency Poultry Disease)

Highly Pathogenic Avian Influenza (Emergency Poultry Disease, OIE List A Disease)

Infectious Avian Encephalomyelitis

Infectious Bursal Disease

Marek's Disease

Mycoplasma gallisepticum

Newcastle Disease

Paramyxovirus

Pullorum Disease (Emergency Poultry Disease)

Salmonella enteritidis

## STAGES OF EMERGENCY POULTRY DISEASE

### **Stage I: Poultry Disease Advisory**

Criteria: Suspicion of an Emergency Poultry Disease reported to the State Veterinarian

Notification: State Veterinarian will notify Executive Director of Michigan Allied Poultry Industries, Inc. and USDA/APHIS Area Veterinarian-in-Charge of the occurrence. Executive Director of Michigan Allied Poultry Industries, Inc. will notify designated representatives of egg-laying chickens, broiler chickens, and turkeys.

Action:

1. Controlled and restricted movement affected premise(s) and area
2. Identify at-risk premises
3. Obtain epidemiological information
4. Outline and implement dead bird disposal

### **Stage II: Poultry Disease Watch**

Criteria: Emergency Poultry Disease confirmed at an approved laboratory

Notification: All of the above notification is performed.

Action:

1. All actions of above are completed and remain in effect.
2. Quarantine zone is established and consists of an infected and a surveillance zone
3. Infected zone is considered to be a 5 mile radius surrounding infected premise
4. Surveillance zone is considered a 10 mile radius extending from the infected zone
5. Movement within infected area is stopped.
6. Movement within surveillance zone is minimized and controlled.
7. Planning is started for eradication and bird disposal.
8. Begin diagnostic testing of infected and surveillance zones. (surveillance zone done first)

### **Stage III: Poultry Disease Warning**

Criteria: Emergency Poultry Disease confirmed at a reference laboratory including, but not limited to, the National Veterinary Services Laboratory (NVSL) at Ames, Iowa.

Notification: All of the above notification is performed.

Action:

1. All actions of above are completed and remain in effect.
2. Eradication and bird disposal begins
3. Movement in infected and surveillance occurs only by permission of State Vet.
4. Diagnostic testing continues for 3 weeks after confirmation of last occurrence

### **Stage IV: Poultry Disease Final Action**

Criteria: Emergency Poultry Disease has escaped the control mechanisms already established requiring immediate assistance of the federal government. This stage may be implemented in the event of a Foreign Animal Disease such as Exotic Newcastle disease or Highly Pathogenic Avian Influenza.

Notification: All of the above notification is performed.

Action: Once a state of emergency is declared by the Governor, actions will be taken by the USDA/APHIS in consultation with the State Veterinarian.

## **DISEASE PRIORITY CLASSIFICATION**

### **Priority Level I**

Diseases in this classification consist of diseases with catastrophic consequences. These include OIE list A diseases and Foreign Animal Diseases.

#### Priority Level I Disease on the State Reportable Disease List

Avian Influenza (High Pathogenic strains)  
Exotic Newcastle Disease  
Duck Viral Enteritis

### **Priority Level II**

Diseases in this classification consist of those diseases with a potential to be catastrophic under the right conditions. These diseases consist of Influenza viruses of H5 and H7 of low pathogenicity, infectious laryngotracheitis, and any other diseases that if control measures aren't implemented have the potential for catastrophic consequences.

#### Priority Level II Disease on the State Reportable Disease List

Avian Infectious Laryngotracheitis  
Avian Influenza (Low Path H5 and H7)  
Chlamydiosis (Poultry and Pet)  
Duck Viral Hepatitis  
Equine Encephalomyelitis  
Fowl Cholera (in wild waterfowl)  
Fowl Typhoid (Salmonella gallinarum)  
Pullorum (Salmonella pullorum)

### **Priority Level III**

Diseases in this classification consist of those diseases on the state reportable disease list which have with the ability to cause high morbidity but low mortality and may have the potential to cause dire economic consequences.

#### Priority Level III Disease on the State Reportable Disease List

Avian Infectious Bronchitis  
Avian Influenza (All isolates other than H5 and H7)  
Avian Tuberculosis  
Fowl Cholera (in poultry)  
Fowl Pox  
Infectious Avian Encephalomyelitis  
Infectious Bursal Disease  
Marek's disease  
Mycoplasma gallisepticum  
Newcastle (other than Exotic)  
Paramyxovirus 1 of pigeons  
Salmonella enteritidis (egg associated human illness, clinical illness in poultry or with a trace back incident)

## **ACTIONS TO BE TAKEN ASSOCIATED WITH DISEASE PRIORITY CLASSIFICATION**

### **Priority Level I**

Will trigger all stages of the Emergency Poultry Disease response.

### **Priority Level II**

Will trigger stages I, II of the Emergency Poultry Disease response. Implementation of stage III will depend on disease occurrence circumstances and according to the characteristics of each specific disease.

### **Priority Level III**

Will trigger stage I. Implementation of stage II will depend on disease occurrence circumstances and according to the characteristics of each specific disease.

### ACTION BY MICHIGAN STATE VETERINARIAN

- A. Immediate notification of USDA/APHIS Area Veterinarian-in-Charge and Executive Director of Michigan Allied Poultry Industries, Inc. of stage I, II, III, or IV Emergency Poultry Disease occurrence. Action(s) taken will reflect the disease priority level.
- B. Activity:
  1. Quarantine individual infected premise and stop movement of poultry and livestock.
  2. Obtain epidemiological information of all activities on farm, especially 72 hours prior to positive presumptive diagnosis.
  3. Plan necessary emergency services (such as supplies and personnel for testing, cleaning, disinfecting, and monitoring) and establish time schedule for expediting these services.
  4. Identify other potentially exposed farms, contacts, and outline procedure for handling. (Use county maps to facilitate this step).
  5. Outline and implement slaughter (if appropriate) or dead bird disposal for all quarantined farm(s).
  6. Plan appropriate routes of animal movement for slaughter or disposal
  7. If disposal, advise Michigan Allied Poultry Industries of disposal location
  8. Make specific recommendations on disposition of the quarantined premise or area involved.

### ACTION TO BE TAKEN BY MICHIGAN ALLIED POULTRY INDUSTRIES, INC. (MAPI)

- A. Immediate notification of egg-laying, broiler chicken and turkey representatives (see Appendix)
- B. Serve as consultant to State Veterinarian's Office where requested

### ACTION TO BE TAKEN BY EGG-LAYING, BROILER CHICKEN AND TURKEY REPS.

- A. Immediate notification of all bird, feed, vaccine, and equipment suppliers, as well as, animal movement crews, vaccine crews, vendors, and outside contractors.

### ACTION TO BE TAKEN BY GROWERS

- A. Immediately telephone flock owner and/or supervisor or poultry veterinarian of suspicion of emergency disease.
- B. Initiate measures to prevent further spread of this disease.

Follow these procedures on your farm:

- Lock poultry houses, post signs, and secure premise entry gates.
- Stop all service and delivery personnel and visitors at entry gates.
- Restrict visitors. Permit only essential personnel on your farm and then control or monitor their movements. A sign in log should be routinely completed by all visitors.
- Allow only clean and disinfected live-haul trucks and crates on your premises.

- Make sure the cars, farm vehicles and equipment have been cleaned and disinfected before allowing them on your farm
- Clean and disinfect cars, farm vehicles and equipment before they leave your farm
- If possible, designate a feed truck to be used on the infected farm only
- Feed should be transferred from the “clean” truck to the farm truck in an up-wind or off-site area. The driver of the farm truck should stay in his truck while the feed is transferred.
- Provide sanitized disposable outerwear, headgear and rubber boots for essential, authorized people who visit your farm
- Use only service crews (feed delivery, bird handling, egg pick-up, and other operations) who follow strict sanitary standards.
- Wash and disinfect poultry equipment, cages, egg flats, and all other items that can be taken off your farm.
- Remember that children and pets that play and work on your farm may have been on other farms. Keep them away from poultry houses.
- Launder clothing and disinfect footwear.
- If possible, disposal or slaughter of infected flocks should be performed at the end of the week, preferably on a Friday during the last shift.
- Reinforce biosecurity training for employees

Follow these procedures after being with birds that look sick:

- Disinfect footwear worn on the visit.
- Remove clothing and outerwear and put them directly in the washing machine.
- Launder clothes worn on visit.
- Wash eye wear with soap and water or use alcohol wipes.
- Bathe, wash hair, cough, spit, and blow nose.
- Put on freshly laundered clothes and clean footwear.
- Wait at least 24 hours before visiting any poultry houses.
- Notify task force personnel about those sick birds.
- Keep birds isolated – lock building where they are housed.
- When dead birds are going to be monitored by state or federal authorities, dead birds should be placed in a plastic bag and removed from the house. That bag containing dead birds, once outside of the poultry house, is placed in another clean plastic bag. The double-bagged birds are taken to the edge of the property where a plastic garbage can with lid has been placed. The outside of the second bag is sprayed with a disinfectant and then placed in the plastic garbage can for pick up.

#### ACTIONS TO BE TAKEN BY GOVERNMENT AUTHORITIES DURING AN INCIDENT

- Call farm owners before going to visit them
- Arrive at agreed upon time in the location where instructed
- Arrive at location freshly showered in recently laundered clothing and clean shoes
- Before leaving vehicle or area adjacent to the vehicle, don disposable head cover, coverall and boots

- Do not go into poultry buildings unless accompanied by farm owner or representative
- Complete surveillance, collect samples, and investigational epidemiology
- Return to vehicle where you will remove disposable head wear, coveralls, and boots. Place them in a pile by your vehicle for the farmer to dispose of.
- Before getting into vehicle, wash hands with disinfectant, clean glasses with alcohol wipes.
- As you enter car, spray shoes with disinfectant. Place only disinfected shoes in vehicle
- Visit only 1 farm per day in an infected area.
- Up to 3 farms may be visited per day in the surveillance area as long as no illness is evident.
- When collecting dead animals from roadside garbage cans, put on disposable covering (see above) before leaving vehicle.
- Leave car, go to garbage can.
- Remove clean garbage bag from trunk and put double bagged birds into this bag.
- Put triple-bagged dead birds in car trunk
- Remove disposable covering and either throw onto property or put in a plastic bag. Close bag
- Follow disinfection of hands and shoes as described above.

## AVIAN DISEASE PREVENTION

Most contagious poultry diseases do not affect humans. Deaths have occurred from prolonged contact with poultry infected with avian influenza H5N1 and H7N7 in 1997, 2003, and 2004 outside of the US. However, humans may unknowingly spread the causative agent and the things people move from one poultry premises to another may also spread disease. When the disease is highly contagious every facet of the industry must be committed to a very strict disease prevention program. If there are weak links, diseases will find them and spread further.

### MANAGEMENT

Make sure all of your personnel who visit poultry premises for any reason are properly informed, trained, and equipped to carry out the disease prevention required to protect your assets. You know your employees and they listen to what you say more than anyone else. Develop, implement, and monitor the best disease prevention program you can devise. Remember it must start with you.

### GROWERS

Limit access to entire premises.

Maintain a visitor log containing name of visitor, date of visit, reason for visit, which facility they visited, and the last farm that they visited before visiting your farm.

Provide fresh disinfectant, water, pail, brush, rubber boots, hats, coveralls and boot baths at entrance. Do not allow anyone to enter your poultry house.

Lock poultry houses

Maintain pest control programs including wild bird screening, rodent and insect control.

### SERVICE CREWS

Wear freshly laundered hats and outer garments, and cleaned and disinfected boots onto each premise you enter. When you leave, make sure you do not carry disease with you. Thoroughly wash face, hands, forearms, and other exposed areas of your body with soap and water at least once. Thoroughly clean and disinfect boots. Wash eye wear. For routine poultry farm visits, put outer garments in clean plastic bags, tie, and transport them to be laundered. Establish a clean area of the vehicle and dirty area of the vehicle. The clean area is where clean coveralls, boots, and head covers are kept. The dirty area is where dirty coveralls are placed in tied plastic bags and where samples and trash are kept in tied plastic bags. Visiting farms with disease should be scheduled for the last day of the week. During emergency disease situations, immerse all outer garments in disinfectant and place in plastic bags for transport to where they will be laundered.

## FEED DELIVERY

Before you leave the mill, make sure you have everything you need to clean and disinfect yourself and your truck before you leave each poultry premises. Remember, all the pathogens do not stay inside the poultry house. Feathers, insects, dandruff, and dust from manure is laden with microbes when the flock is infected. It is virtually impossible to deliver feed to an infected premises without becoming contaminated. It is best if a feed truck is kept on the infected farm and does not leave it. Feed truck drivers should never go into poultry houses. They should stay by their truck. Disposable boots should be put on before leaving the cab of the truck. These boots should be left on the farm when they are removed. Once those boots are removed, the hands should be disinfected. After disinfecting the hands, the shoes should be sprayed with a disinfectant as the driver gets back into the cab. If necessary, the pedals and steering wheel should be sprayed with disinfectant. A fly spray may be necessary to kill flies in the cab before leaving the farm.

## EGG PICKUPS AND DELIVERIES

Egg flats and other packing materials contaminated by fecal material, insects, and broken eggs from infected premises are perhaps the way disease agents most often spread from one layer flock to the next. Do not allow used flats near your birds. Only allow cleaned and disinfected or new flats in your poultry houses. If eggs must be transferred to used flats for delivery to processing plants, do it as far as possible from the chicken houses, preferably off the premises. Make sure all personnel working with used egg flats and other packing materials change clothes, disinfect footwear, and thoroughly wash face, hands, and forearms before going near your layers. Egg flats and egg carts should be cleaned and disinfected before putting on delivery truck for delivery to the farm. If possible, use color coded flats and limit farms to a specific color. This allows instant recognition of flats that do not belong on a farm. Infected farms should be collected at the end of the day.

## ADDING BIRDS

Make sure all additions and replacements are disease-free. Single age, all-in, all-out farms are best. Laboratory testing is available to detect infectious diseases of poultry prior to bird placement.

## VECTOR CONTROL

Flies, rodents, sparrows, beetles, other similar species, persons, and equipment may spread poultry diseases if they go from an infected premises to a non-infected one. Vector control is always important, but most especially when an infected flock is being depopulated. These vectors may go to the nearest poultry premises if they are not eliminated or controlled with the infected birds.

## HERE ARE SOME OF THE PRIMARY WAYS POULTRY DISEASE SPREADS:

- Direct bird-to-bird contact.
- Air, manure, dust, litter, feathers, and debris from infected farms spread by poultry, other fowl (including wild waterfowl and game fowl), animals, and people.

Examples are:

- Contaminated feed, water, eggs, and other poultry products
- Contaminated filler flats, egg cartons, and shipping boxes
- Contaminated footwear and clothing
- Contaminated poultry house equipment
- Contaminated feed spillage

Movement of people, vehicles, and equipment from farm to farm (consider each premises as potentially infected).

Examples are:

- Catching crews and their crates, trucks, or other catching/hauling equipment
- Construction, vaccination, and other service crews and equipment
- Rendering trucks
- Informal and business meetings of poultry personnel and their families
- The local coffee shop
- Unrestricted movement of children who play and work on farms and enter to play near poultry buildings
- Hunters who go from one poultry farm to another
- Wild birds
- Dressing wild waterfowl or game fowl on poultry farms or workers that hunt
- Improper disposal of poultry carcasses, litter, contaminated water, or other poultry wastes.
- Dust-laden fur of rats, mice, dogs, cats, and pet chicks or other free-moving fowl
- Spread by flies, beetles, and other insects and mites

## **POULTRY PROCEDURES**

### PROTECT YOUR POULTRY

#### **ESTABLISH YOUR OWN CLEANING AND DISINFECTION FACILITIES:**

Equipment:

- Water hoses
- Soap
- Warm water
- Disinfectant
- Brushes
- Disinfectant footbath
- Sanitary disposal of contaminated disposal items

Follow these procedures on your farm:

- Lock poultry houses and secure premises entry gates.
- Stop all service and delivery personnel and visitors at entry gates.
- Restrict visitors. Permit only essential personnel on your farm, and then control or monitor their movement.
- Allow live-haul trucks and crates on your premises only after cleaning and disinfecting.
- Make sure that crates, farm vehicles, and equipment have been cleaned and disinfected before allowing them on your farm.
- Provide sanitized disposal outerwear, headgear, and rubber boots for essential authorized people who visit your farm.
- Provide convenient disinfectant facilities and easy access to water so people can clean their shoes, hands, and forearms.
- Use only service crews (feed delivery, egg pickup, and other operations) who follow strict sanitary standards.
- Wash and disinfect poultry equipment, cages, egg flats, and all other items that can be taken off your farm.
- Remember that children who play and work on your farm may have been on other farms. Keep them away from poultry houses. Launder clothing and disinfect footwear.

Follow these procedures after being with birds that look sick:

- Disinfect footwear worn on visit.
- Launder clothes worn on visit.
- Wash hair and bathe.
- Put on freshly laundered clothing and clean footwear.
- Wait at least 24 hours before visiting any poultry houses.
- Notify task force personnel about the sick birds.
- Keep bird's isolated - lock buildings where they are housed.

#### DELIVERY TRUCK DRIVERS: HELP PREVENT CONTAGIOUS POULTRY DISEASES

Here are some things truck drivers must do to prevent disease spread:

Treat every poultry facility where a delivery is made as a potentially infected farm, including premises with fancy fowl, pheasants, etc. You can be exposed to disease agents by direct contact of your truck, clothing, and footwear with infected poultry or manure. Thus, you can carry poultry infections with you from farm to farm during deliveries and never know it.

Delivery guidelines:

- Wear plastic disposable boots over regular footwear, and put them on before getting out of your truck cab at poultry facilities. Use disposable outerwear (coveralls) and headgear if provided.
- Do not enter poultry houses and have contact with poultry.
- Avoid dust and fecal contamination (manure/litter) of clothing and footwear. (Have an extra set of clean outer garments for use in case of contamination).
- Clean up and properly dispose of all spilled feed.
- Use new egg cases and filler flats or make sure that used cases and flats have been fumigated and sanitized.
- Disinfect trucks with an approved disinfectant after each delivery. Take particular care on:
  - Tires
  - Undercarriage
  - Walkways
  - Running boards, pedals, and cab floors

Before leaving farm:

- Check truck cabs for flies or other insects, they can carry avian pathogens. If needed, spray cab with fly repellent to make sure that no insects are moved from one farm to another.
- Take off disposable boots, outerwear, etc.
- Wash hands
- Make delivery to infected or suspicious flocks the end of the day.

PROCEDURE FOR HANDLING SUSPECT FARM PREMISES BY FLOCK SUPERVISOR

SUPERVISOR IMMEDIATELY GIVES THIS FLOCK TOP PRIORITY

- A. Have emergency kit in car.
- B. Park vehicle well away from poultry house, preferably in a well-graveled or grassed area.
- C. Put on all wearing apparel (clean), disinfect boots and gloves immediately on arrival.
- D. If an EPD is suspected by the supervisor, collect specimen for diagnosis and use recommended procedures:
  - 1. Select live symptomatic and fresh dead birds. To prevent tearing the bag, cut off beak and feet of dead birds at hock prior to putting these birds in the plastic bag and sealing it. Suspect birds (dead or alive) should be handled in such a manner as to minimize contamination from fecal matter or any other body exudates or feathers.
  - 2. Tie off bag.
  - 3. Disinfect bag and place in second plastic bag.
  - 4. Disinfect second bag.
  - 5. Dispose of boots, coveralls and hats or put non-disposable boots, gloves, coat, and hat in disinfectant and handle routinely. Disinfect eye wear.

6. Be careful to avoid contamination of vehicle.
7. Alert appropriate diagnostic laboratory and await instructions.
8. Launder lab coats.
9. Avoid contact with poultry or poultry industry personnel until there is complete decontamination of individual and car.
10. Run car through car wash and spray inside with disinfectant prior to visiting another farm
11. If for any reason other assistance is needed, radio, or telephone your company office.
12. Implement company quarantine.

#### REQUIREMENTS OF CONTROL AND RESTRICTED MOVEMENT BY COMPANY

- A. Eliminate all service and other visits to that farm, including supervisor, repair, and maintenance personnel.
- B. Fully inform grower of the problem and danger involved.
- C. Specifically restrict movement of grower and family individuals and employees.
- D. Suspend feed deliveries until a specific program is outlined by the State Veterinarian's Office.
- E. Birds will be moved according to procedures outlined by State Veterinarian's Office, including dead bird disposal.
- F. State Veterinarian's Office will outline procedures for house(s) after removal of birds.
- G. Withhold placements until suspect disease is diagnosed.
- H. Post quarantine signs at entrance to farm and on poultry house doors.
- I. Procedure for feed deliveries, assisted by flock supervisor:
  1. Make delivery the last stop for unloading mixed loads.
  2. Driver must not enter poultry house.
  3. Driver must wear plastic boots.
  4. Truck must be run through truck wash before delivering feed to another farm.
  5. Spray disinfectant inside the truck cab.
  6. Keep truck doors and windows closed during unloading operation to keep flies and other insects out. Spray household aerosol insecticide in cab before leaving farm.
- J. Grower and family restrictions:
  1. Limit flock management to specific individuals.
  2. Fully inform these individuals on procedures for clothing, disinfection, dead bird disposal, and limitations on their off-farm visiting. No other farm can be visited and should not come in contact with other growers.
  3. Other family members working away from the farm must not enter poultry house.
  4. Family members who work off the farm must not have contact with any other poultry or pet birds.

## MISCELLANEOUS COMMENTS

- A. All supervisors must have the following emergency kit during an EPD alert.
  - 1. Boots (disposable or re-useable)
  - 2. Plastic bags
  - 3. Disinfectant
  - 4. Copy of this procedure manual
  - 5. Brush
  - 6. Bucket
  - 7. Coat or coveralls
  - 8. Cap
  - 9. Rubber gloves
  - 10. Five quarantine signs (driveway and poultry house door)
- B. All newly hired flock supervisors (full or part-time) must be given information on how to conduct themselves if they encounter an EPD.

## BASIC REQUIREMENTS ON MOVEMENT IN AND OUT OF QUARANTINE AREA (QA)

### Two Types of Movement

1. Prohibited – not permitted out of QA.
2. Restricted – only permitted out of QA after having met certain requirements.

### Live Birds From QA

- A. Infected or Exposed Birds
  1. Will not move.
  2. Will eradicate – move by permit to landfill or renderer (rendered temperature 160 degrees F) or on farm incineration
  3. Depending on disease, birds may go to slaughter
- B. Uninfected.
  1. Can move only by pre-inspection while still on farm.
  2. Then are issued permit to go directly to slaughter.
  3. Trucks and transport coops are cleaned and disinfected at slaughter plant
  4. No live birds move in the QA without inspection and permit and then only to slaughter.

### Eggs

- A. Table Eggs.
  1. Eggs from infected flocks depending on disease may not be used.
  2. May only be allowed out of QA by permit to be buried or burned.
- B. Table Eggs from Uninfected Flocks (Means showing no signs of disease, no unusual drop in egg production).
  1. Can only be shipped with permit.
  2. Eggs must be free of litter and fecal material.
  3. Eggs must be washed and sanitized with chlorine.
  4. Only leave QA in new or disinfected flats and cases.
- C. Eggs sent to breakers
  1. Egg shells and packing materials will be handled and treated appropriately so as not to spread the disease.

### Hatching Eggs – Meat Type Birds

1. All flocks must be inspected.
2. Flocks must be serologically negative for outbreak disease if eggs are shipped.
3. Must hold eggs for five (5) days after inspection before shipment
4. If leaving QA, the eggs must be fumigated.

### Baby Chicks or Poults

1. If hatchery is in QA:

- a. There will be no movement of chicks or poults out of QA.
  - b. Chicks or poults from hatchery in QA may go out of QA to an approved grower operation (no multiple age). Chicks are sent by permit only and then are placed under special state quarantine and monitoring.
2. Baby chicks and poults may leave QA without restriction provided when ready to move they follow the provisions as set up for all uninfected poultry moving out of QA.

Visual Inspection  
Permit Issued  
To Slaughter Only  
Clean and Disinfected

### Poultry Carcasses

After passing the above criteria, there are no restrictions placed on processed poultry carcasses that have come from QA.

### Feed Trucks and Regulation of Feed Deliveries Into and Out of QA

1. This area is not specifically covered in QA regulation.
2. However, poultry companies must take it upon themselves to have trucks cleaned and disinfected after each delivery in the QA.

Other service vehicles and personnel must be handled in same way.

Feces must be removed from anything that can carry over to next stop.

## **SUGGESTED SEQUENCE OF EVENTS FOR DEPOPULATED FARMS**

Day 1: Last day of depopulation

NOTE: No manure or other waste from the interior of the poultry house may be removed until Day 11.

Day 2: Step 1 – Interior adult fly knockdown spray  
Step 2 – Exterior adult fly knockdown spray  
Step 3 – Clean scrape boards (where applicable)  
Step 4 -- Clean rafters and side walls

Day 3: Step 1 – Broad spectrum interior insecticide dust/spray  
Step 2 – Rodent control program

Day 4 through

Day 10: No action is to be taken. Time is needed for insect and rodent control to act.

Day 11: Step 1 – Clean and disinfection can begin. This is the earliest that C&D operations may begin.  
Step 2 – Interior and exterior residual insecticide spray, following C&D operations and certification of the poultry house by the Michigan State Veterinarian's Office.

### **GUIDELINES FOR CLEANING AND DISINFECTION For Release of Quarantine of Poultry Premises**

Cleaning should use pressure washers with hot water to remove all organic matter before applying disinfectant.

1. Remove all litter/manure (this includes liquid).
2. Clean all cages inside and out
  - a. Drop boards (clean both sides)
  - b. Floor
  - c. Ceiling (this includes fly specks)
  - d. Rafters
  - e. Ridge vents
3. Clean all motors
4. Clean all fans (both inside and out)
  - a. Clean both sides of the shutters
5. Clean under all floors and beams.
6. Clean all floors and walkways.
7. Clean egg room and conveyor belts.
8. Clean all heaters.
9. Clean all hand tools.
10. Clean all storage rooms and offices.
11. Clean all baths.
12. Clean all tractors, manure wagons, and loaders.
13. After you have cleaned, call C&D office at (517) 373-1077.

## Appendix A

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616-399-0373

# DESTRUCTION DECISION MODEL FOR LIVESTOCK DISEASE PROBLEMS

CLINICAL AND/OR LABORATORY  
CONFIRMED DISEASE DIAGNOSIS

